

## CLAIMS

1. A communication apparatus comprising:
  - a controller (800);
  - an interface (806; 850) adapted to receive an electronic message (852);
  - a display (300; 836); and
  - a memory (802; 804), said memory being adapted to store image data representing at least one predefined icon to be presented on said display so as to indicate receipt of said electronic message, **characterized** in that said memory (802, 804) is adapted to store an association (844, 846) between the or each predefined icon (846) and a sender (844) of electronic messages; and in that said controller (800) is adapted to determine a sender (857) of said received electronic message (852), to match the sender thus determined with the or each predefined icon by way of said association, and to present a matching icon, if any, on said display (300) to indicate receipt of said received electronic message as well as the sender thereof.
2. An apparatus as in claim 1, wherein said electronic message (852) is of a type having a control data portion (856) and a message data portion (858), the control data portion including a message sender identity (857), wherein said controller (800) is adapted to determine the sender of said received electronic message from the message sender identity.
3. An apparatus as in claim 2, wherein said electronic message is an SMS or MMS message.
4. An apparatus as in claim 2 or 3, wherein said message sender identity is a telephone number for a

mobile telecommunications system such as GSM, UMTS, D-AMPS or CDMA2000.

5. An apparatus as in claim 2, wherein said electronic message is an email message.

6. An apparatus as in any one of claim 1-5, wherein said controller (800) is adapted to simultaneously present a plurality of matching icons (616-617; 716-717) on said display (300) to indicate a corresponding plurality of received messages.

7. An apparatus as in any one of claim 1-5, wherein said controller (800) is adapted to display, for each presented matching icon, a numeric indicator to indicate the current number of unread messages received from a respective sender associated with each presented matching icon.

8. An apparatus as in any one of claim 1-7, wherein said controller (800) is adapted to enhance the presentation of the or each presented icon with a visual effect such as animation, scrolling, morphing, flashing or changing colors.

9. An apparatus as in any one of claim 1-8, further comprising at least one of a phonebook (840), address book or contact book, wherein the association between the or each predefined icon and a sender of electronic messages is stored in an entry (842) in said phonebook, address book or contact book.

10. An apparatus as in claim 9, wherein the association comprises a link to an image file, which is stored outside of said phonebook entry (842), address book entry or contact book entry but inside said memory

(802, 804), and which contains image data that defines the or each predefined icon.

11. An apparatus as in claim 9, wherein the association comprises image data that defines the or each predefined icon and is stored in said phonebook entry (842), address book entry or contact book entry.

12. An apparatus as in any one of claim 9-11, wherein the association further comprises a message sender identity (844) as defined in claim 2.

13. An apparatus as in any one of claim 1-12, further comprising means for adding a new icon to said memory (802, 804), and means for generating in said memory a new association between said new icon and a sender of electronic messages.

14. An apparatus as in claim 13, wherein said means for adding a new icon comprises an image editor (860) in said apparatus.

15. An apparatus as in claim 13 or 14, wherein said means for adding a new icon comprises a communications interface of said communication apparatus.

16. An apparatus as in claim 15, wherein said communications interface is at least one of:

a serial interface (810) such as IrDA, USB or RS232;

a short-range supplementary radio data interface (808) such as Bluetooth;

a WAP compatible interface (870); and

an RF interface (806) for a mobile telecommunications system such as GSM, UMTS, D-AMPS or CDMA2000.

17. An apparatus as in claim 15, wherein said communications interface is the same as said interface (806; 850) adapted to receive an electronic message.

18. An apparatus as in any one of claim 1-17, wherein said communication apparatus is a portable telecommunication apparatus, such as a mobile terminal for GSM, UMTS, D-AMPS or CDMA2000.

19. A method of indicating receipt of an electronic message in a communication apparatus (100) having a display (300, 836) and a memory (802, 804), wherein at least one predefined icon (316, 846) is provided in said memory, a received electronic message (852) is matched with the or each predefined icon, and a matching icon (316), if any, is presented on said display (300) to indicate said received electronic message, **characterized** by the steps of

providing, in said memory (802, 804), an association (844, 846) between the or each predefined icon (846) and a sender (844) of electronic messages;

determining a sender (857) of said received electronic message (852); and

determining the matching icon, if any, through the sender thus determined and said association in said memory.

20. A method as in claim 19, wherein said electronic message (852) is of a type having a control data portion (856) and a message data portion (858), the control data portion including a message sender identity (857), wherein the sender of said received electronic message is determined from the message sender identity.

21. A method as in claim 20, wherein said electronic message is an SMS or MMS message.

22. A method as in claim 20 or 21, wherein said message sender identity is a telephone number for a mobile telecommunications system such as GSM, UMTS, D-AMPS or CDMA2000.

23. A method as in claim 20, wherein said electronic message is an email message.

24. A method as in any one of claim 19-23, performed repeatedly for a plurality of received messages, so that a corresponding plurality of matching icons (616-617; 716-717), if any, are presented simultaneously on the display (300).

25. A method as in any one of claim 19-23, performed repeatedly for a plurality of received messages so that only the last received message, irrespective of sender, is indicated by its matching icon, if any, on the display.

26. A method as in any one of claim 19-23, performed repeatedly for a plurality of received messages so that each presented matching icon, if any, is provided with a numeric indicator to indicate the current number of unread messages received from the sender associated with the presented matching icon.

27. A method as in any one of claim 19-26, wherein the presentation of the or each presented icon is enhanced with a visual effect such as animation, scrolling, morphing, flashing or changing colors.

28. A method as in any one of claim 19-27, wherein a default icon is presented on said display (300) to indicate said received electronic message, in case no matching icon has been determined.

29. A method as in any one of claim 19-28, wherein the association between the or each predefined icon and a sender of electronic messages is stored in a phonebook entry (842), address book entry or contact book entry in said memory (802, 804).

30. A method as in claim 29, wherein the association comprises a link to an image file, which is stored outside of said phonebook entry (842), address book entry or contact book entry but inside said memory (802, 804), and which contains image data that defines the or each predefined icon.

31. A method as in claim 29, wherein the association comprises image data that defines the or each predefined icon and is stored in said phonebook entry (842), address book entry or contact book entry.

32. A method as in any one of claim 29-31, wherein the association further comprises a message sender identity (844) as defined in claim 20.

33. A method as in any one of claim 19-32, comprising the additional steps of adding a new icon to said memory (802, 804), and generating in said memory a new association between said new icon and a sender of electronic messages.

34. A method as in claim 33, wherein said step of adding is preceded by a step of generating said new icon locally by way of an image editor in said communication apparatus.

35. A method as in claim 34, wherein said step of adding is preceded by a step of receiving said new icon through a communications interface of said communication apparatus.

36. A method as in claim 35, wherein said communications interface is at least one of:

- a serial interface such as IrDA, USB or RS232;
- a short-range supplementary radio data interface such as Bluetooth;
- a WAP compatible interface; and
- an RF interface for a mobile telecommunications system such as GSM, UMTS, D-AMPS or CDMA2000.

37. A method as in claim 36, wherein said communications interface is the same as the one through which said electronic message is received.

38. A method as in any one of claim 19-37, wherein said communication apparatus is a portable telecommunication apparatus, such as a mobile terminal for GSM, UMTS, D-AMPS or CDMA2000.

39. A method for remote distribution of icon data for indicating receipt of electronic messages to a communication apparatus (100), characterized by the steps of

- providing a computerized icon ordering service;
- accepting (1002) a user's selection of one icon among a plurality of available icons;
- forming (1012) an icon data set that defines said selected icon;

- delivering (1012) said icon data set electronically to said communication apparatus (100),

- wherein said steps of forming and delivering said icon data set are performed in a manner such that said icon data set may be stored upon receipt (1100) in said communication apparatus and be associated (1202; 1216) with a sender of electronic messages.

40. A method as in claim 39, wherein said step of providing a computerized icon ordering service is pro-

vided from a server (122) connected to a wide area network (120) and said step of accepting (1002) a user's selection of one icon is performed through a user interface (126) which is provided by said server and is accessible over said wide area network.

41. A method as in claim 39, wherein said step of providing a computerized icon ordering service is provided from a server connected to a telecommunications network (110; 130) and said step of accepting a user's selection of one icon is performed by accepting commands which are entered by the user on a telephone apparatus (100, 106; 132) and are transmitted over said telecommunications network.

42. A method as in any one of claim 39-41, wherein, during said steps of forming and delivering (1012) said icon data set, a sender identity is included in or attached to said icon data set so as to allow association of said icon data set with a sender of electronic messages that is represented by said sender identity.

43. A method as in claim 42, wherein said sender identity is a telephone number for a mobile telecommunications system such as GSM, UMTS, D-AMPS or CDMA2000.

44. A method as in any one of claim 39-43, wherein said step of delivering (1012) said icon data set is performed by including said icon data set in an SMS, MMS or email message.

45. A method as in any one of claim 39-44, wherein said communication apparatus is a portable telecommunications apparatus, such as a mobile terminal for GSM, UMTS, D-AMPS or CDMA2000.



46. A server for providing a computerized icon ordering service, characterized by  
a memory for a plurality of available icons;  
a controller, said controller being adapted to perform the method according to any one of claims 39-45.

47. A computer program product directly loadable into a memory of a processor, the computer program product comprising program code for performing the method according to any one of claims 39-45.